REMARKS/ARGUMENTS

This letter is responsive to the Office Action dated **September 25, 2003**.

Claim Amendments

Steps (e) and (f) of Claim 5 have been amended to state that air bubbles are introduced into water in the tank to inhibit fouling of the membranes. This amendment is supported, for example, by page 5, lines 17-19 of the application.

New Claim 12 depends from amended Claim 5. New Claim 12 specifies that only some of the gas liberated from the water in the tank in step (e) is collected and returned to the tank in step (f) and some of the gas is vented to the atmosphere. Support for this amendment can be found at page 7, line 22 to page 8, line 11 of the specification.

The Applicants submit that no new matter is added by these amendments.

Anticipation Under 35 USC 102(b)

In the Office Action, the Examiner rejects Claims 5 under 35 U.S.C. 102(b) as being anticipated by Cote et al. (US 5,607,593). Specifically, the Examiner argues that "when the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process" [*In re King*, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986)]. The Examiner further argues that "'gases liberated from the water' is an inherent property of the water and as such would get recycled with the recycle stream." As will be explained in more detail below, applicant submits that Cote et al. does not describe a device adapted to reinject the recovered ozone back into the installation. Accordingly, applicant submits that it cannot be assumed that the device, which is not described in Cote, will inherently perform the claimed process.

Cote et al. relates to a water treatment installation that includes an ozone injection means. The installation also has means for the recovery of residual ozone. Since ozone is a toxic gas, it cannot be released directly into the environment. Accordingly, Cote et al. provides that either: (1) the recovered ozone could be destroyed; or (2) the recovered ozone could be reinjected back into the installation (see col. 4, lines 45-48). However, applicant submits that Cote et al. only describes a device that recovers and destroys the ozone. Specifically, a hood 12 is set up above the reactor 1 that enables the recovery and destruction of the residual ozone coming from the reactor 1 (see col. 9, lines 3-5, col. 13, lines 1-3, and Figures 1, 7 and 8). No alternative device is described. Since Cote fails to describe any device that takes ozone collected under the

hood 12 and returns it to the tank, it cannot be assumed under the *In re King* doctrine that Cote would perform the claimed process.

The Examiner argues that various methods of injecting and recycling the recovered ozone are given in columns 4-6 of Cote et al. Applicant submits that this interpretation of Cote et al. is incorrect. Specifically, Cote et al. teaches withdrawing water from the installation, injecting fresh ozone from an ozone supply means, and returning the mixture of water and ozone back into the installation (see col. 6, lines 1-21, col. 11). In an embodiment shown in Figure 7, a recirculation loop 21 permits the injection of ozone in a biphase form through the use of ozone dissolving means (see col. 11, lines 32-47). In an embodiment shown in Figure 8, a recirculation loop 21 permits the injection of ozone in a monophase form through the use of means for the pressurized dissolving of ozone in water (see col. 11, lines 48-58). These loops 21 recirculate water from the tank and not gases already liberated from the tank water. Neither loop 21 returns collected liberated gases by way of bubbles that inhibit fouling of the membranes. Accordingly, it is respectfully submitted that Cote et al. does not anticipate Claim 5 as amended.

Further, claim 5 has been amended to state that air bubbles are introduced into the water in the tank. This step is also not provided in Cote.

Obviousness Under 35 USC 103(a)

The Office Action rejects Claims 6-10 under 35 U.S.C. 103(a) as being unpatentable over Cote et al., and further in view of Dickerson et al. (US Patent No. 6,221,254 B1). Specifically, the Examiner argues that Cote et al. teaches all of the limitations of Claim 5. The Examiner further argues that Dickerson et al. teaches all of the limitations in Claims 6-10.

Claims 6-10 include all of the elements recited in amended Claim 5. As explained above, Cote et al. does not teach all of the elements of amended Claim 5. Accordingly, the Applicants submit that Cote et al. and Dickerson et al. would not provide all of the elements of Claims 6-10, even if those references were combined.

The Applicants further submit that the present claims do not flow naturally from the suggestions in Dickerson. In particular, using bubbles of air to inhibit fouling is completely unnatural to Dickerson which does not even have a membrane to foul. Further, Cote does not mention that the ozone is stripping sufficient carbon dioxide from the water in the tank to cause any shift in pH, and so a need to manipulate carbon dioxide in the manner claimed is also unnatural to Cote.

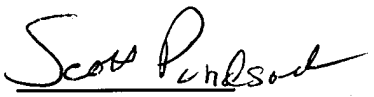
The Applicants also submit that the sources of motivation suggested in the Office Action do not lead to "combining or modifying the teachings of the prior art to produce the claimed invention".

Starting from Dickerson, a desire to use carbon dioxide to control pH would not motivate a person skilled in the art to add membranes and the ozone handling equipment of Cote since the process in Cote would not enhance the process in Dickerson. Starting from Cote, there is no motivation to use carbon dioxide to control pH since there is no suggestion that the pH needs any further control, much less by the use of carbon dioxide over any other available method of controlling pH. Further, even if a person working with the Cote device did attempt to use carbon dioxide to control pH, Dickerson would lead that person to use carbon dioxide in the manner taught by Dickerson, not in the manner claimed.

For the reasons above, the Applicants submit that the claims are in condition for allowance. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

SINGH et al.



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